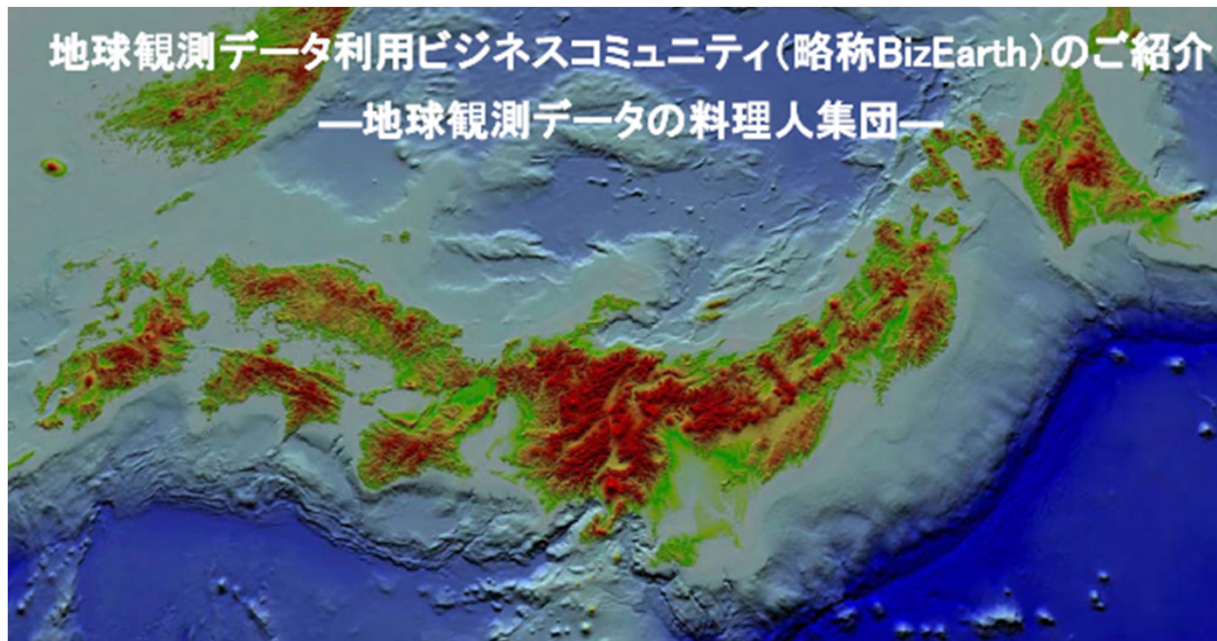


Introduction of an overview of BizEarth and Solutions



Business Community of
Earth Observation Data Users

secretariat@ml.bizearth.net

BizEarth Officers

Chairman

➤ Prf. IWASAKI,
Univ. of Tokyo

Executive secretary

- ARAI, KOKUSAI KOGYO
Co., Ltd.
- MUKAIDA, RESTEC
- INOUE, FUJITSU LIMITED
- ITO, SPACE ENGINEERING
DEVELOPMENT Co., Ltd.
- SHIMODA,
ESRI JAPAN Corp.
- OHKAWA,
*HARRIS GEOSPATIAL
SOLUTIONS K.K.*

Supervisor

- TAKAHASHI, MITSUI BUSSAN
SECURE DIRECTIONS, Inc.

Secretariat

- FUJIKAWA, GEOTECHNOS
Co., Ltd.

1 Overview of our Community

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<https://remosen.jp>

Business Community of Earth Observation Data Users
- Cooking solutions for the Earth observation data -

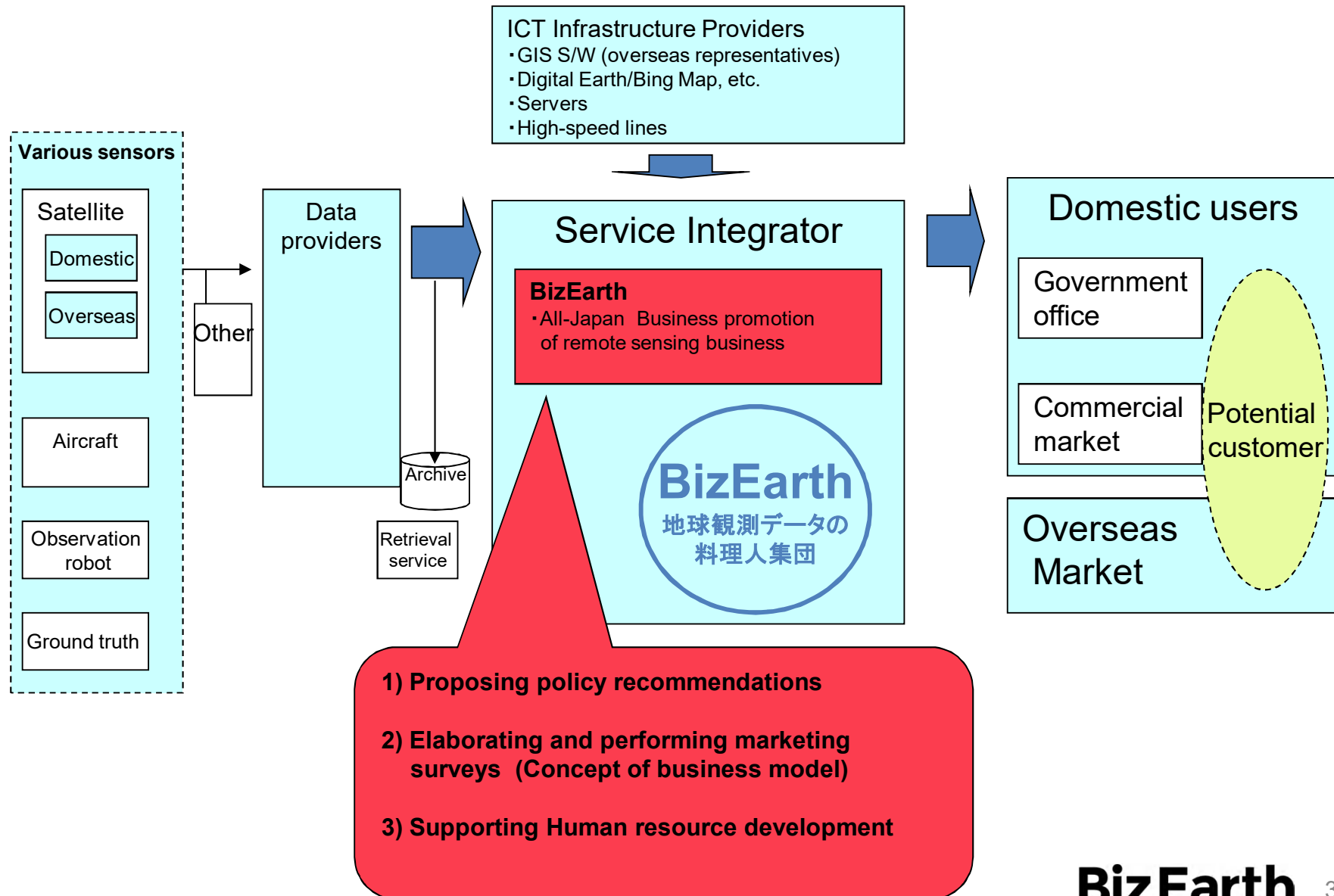
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We are a group striving to promote the use of Earth observation data, primarily within the Industry, by

- 1) Proposing policy recommendations
- 2) Elaborating and performing marketing surveys
(Concept of business model)
- 3) Supporting Human resource development

BizEarth within the Remote Sensing Industry

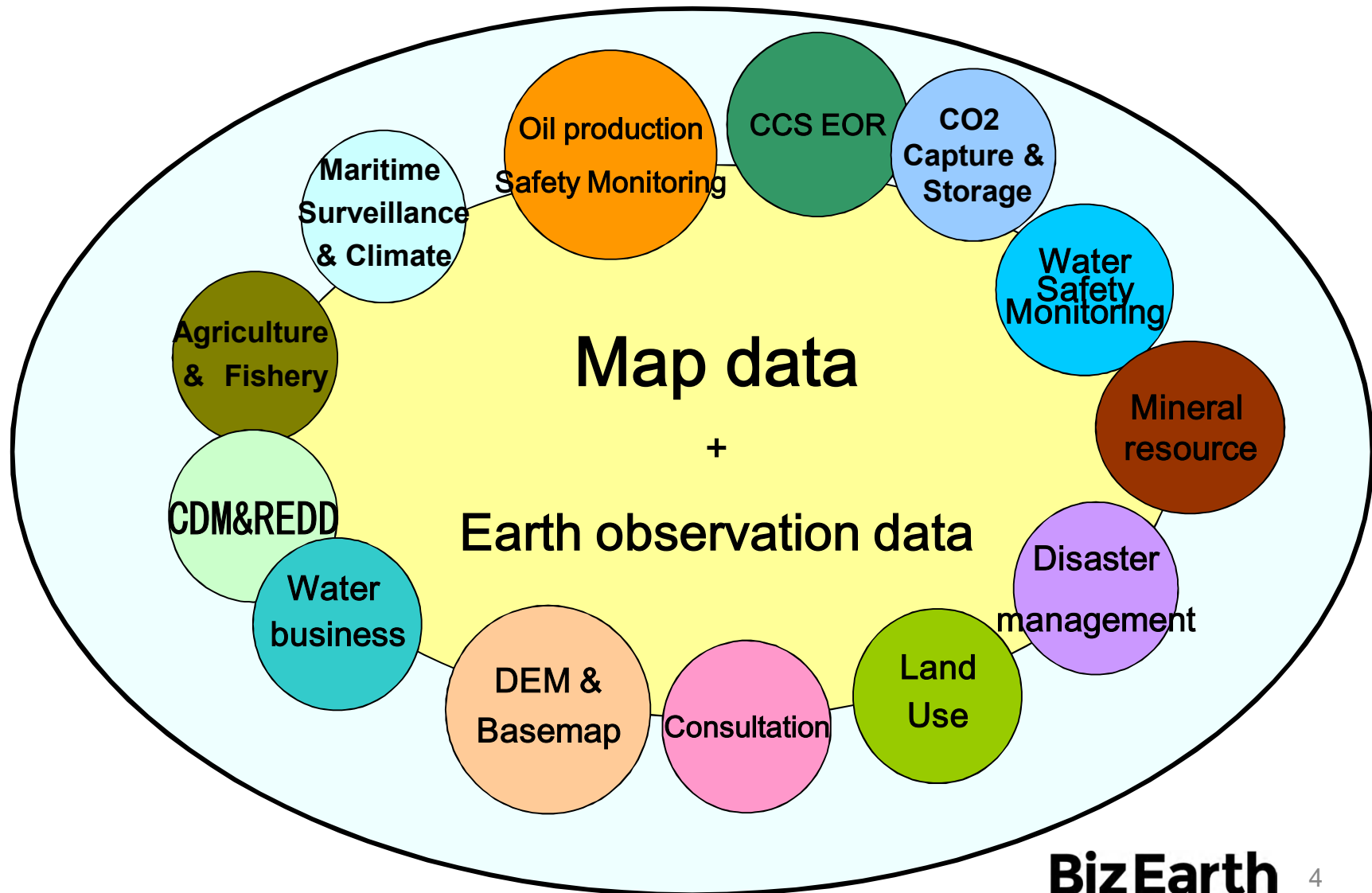
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2 Examples of Solutions we can provide

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2-1 New Solutions

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2-2-1 Monitoring Ground Deformations

2-2-2 Disaster Management Solutions

2-2-3 Agricultural Solutions

2-2-4 Global Environment Problem (Climate Change & Biodiversity)

2-2-5 Forest Management Support

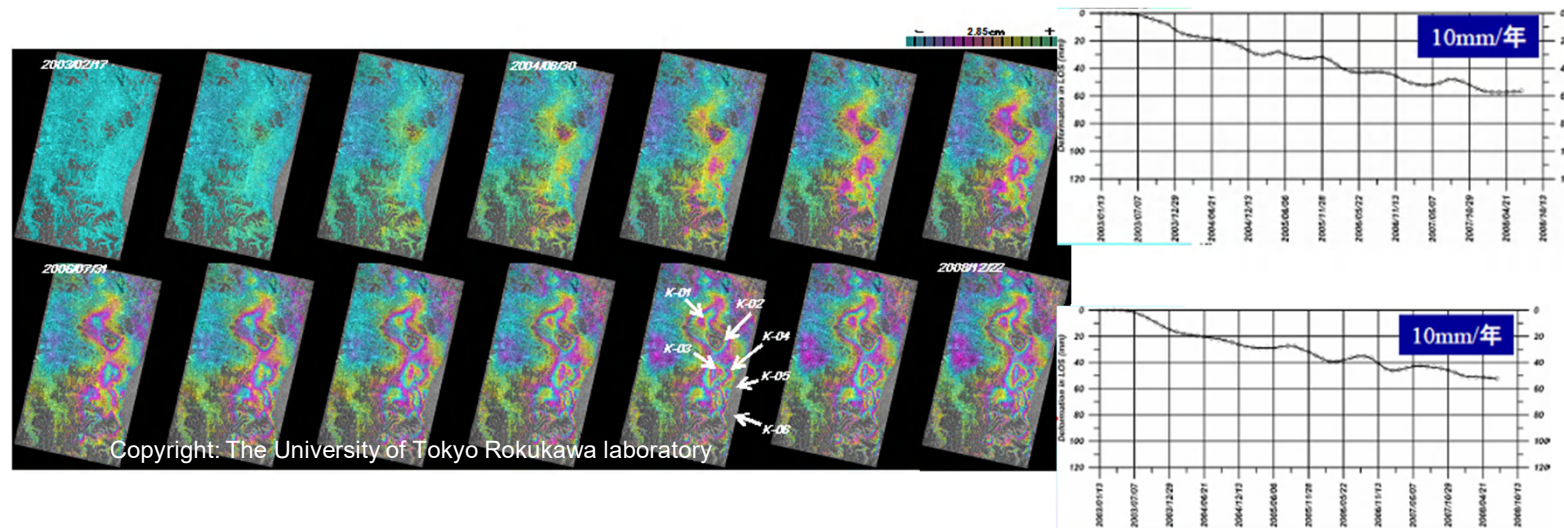
2-2-6 Predicting and Mapping System of Forest Fires

2-2-1 Monitoring Ground Deformations

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Advantages:

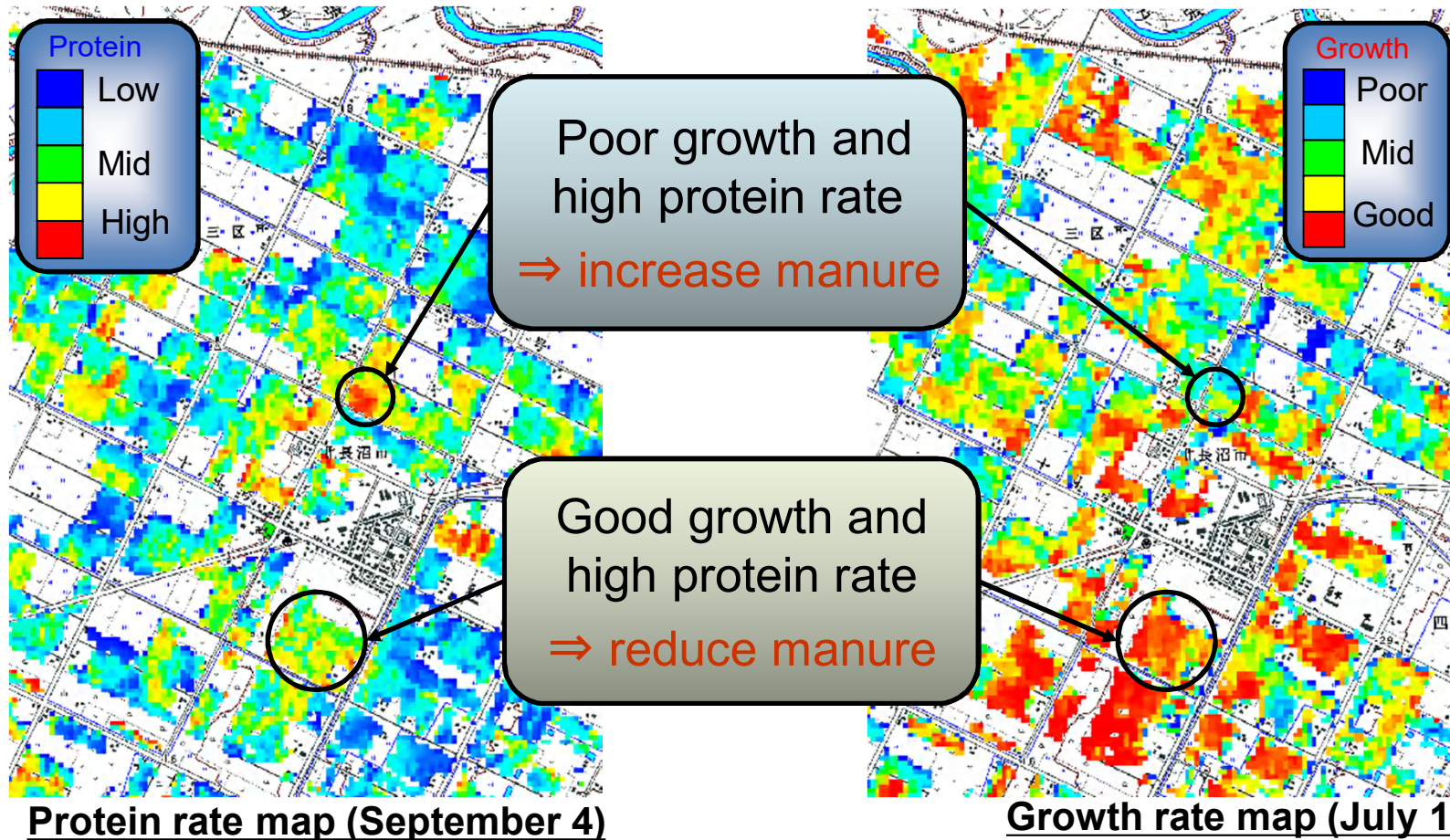
- Handling of various SAR data types and formats (L and C bands)
- Continuous update of the deformation, useful for risk assessment and management
- Ongoing implementation of the latest algorithm (Inversion model) for an effective removal of atmospheric effects, allowing to accurately capture non-linear temporal changes of ground displacement



2-2-2 Agricultural Solutions

Advantages:

- Production of delicious rice using the technology of analysis of earth observation data



2-2-3 Disaster Management Solutions

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Advantages:

- Disaster prevention solution that uses earth observation satellite and communications satellite

Wildfire Area Observed by the Satellite

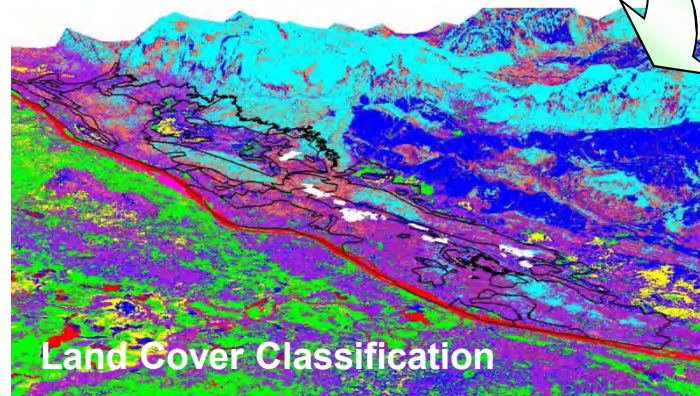
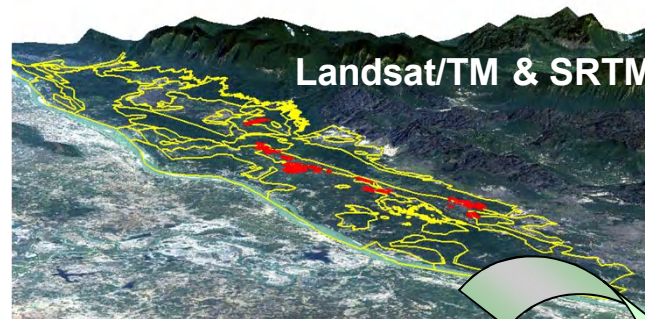
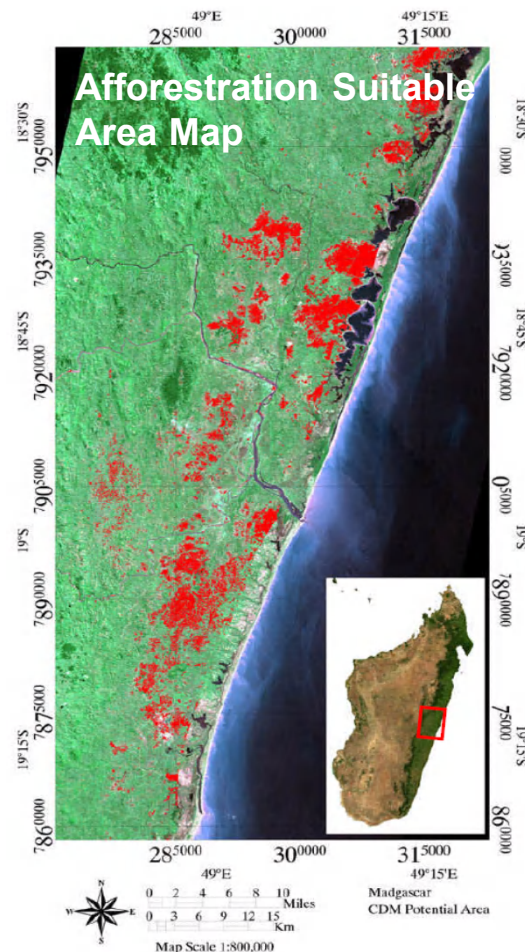


2-2-4 Global Environment Problem

(Climate Change & Biodiversity)

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As for projects on biodiversity conservation and global warming countermeasures using forest carbon sink such as afforestation CDM and REDD/REDD+, we challenge the project design and development of monitoring method combined with knowledge and technique from satellite image analysis and biophysical approach.



■ Key Issue

- Afforestation CDM
- REDD/REDD+
- Biodiversity

■ Solution

- Monitoring System Design
- Project Design
- PDD
- Research & Development

2-2-5 Forest Management Support

Conduct R&D on information extraction for forest management information of high accuracy by data fusion of Hyper-Spectral Sensor and SAR using data mining method. Review monitoring system based on the assumption of application for forest management.

■ Key Issue

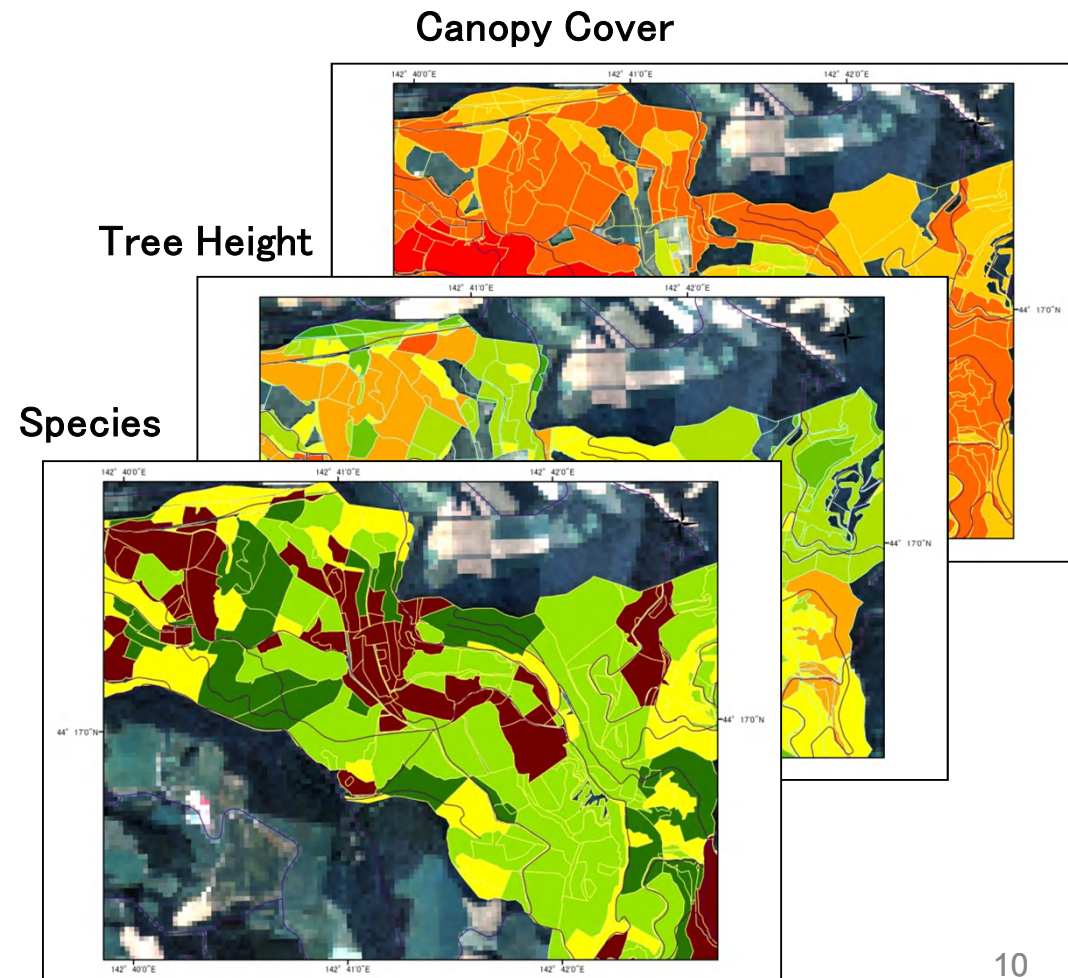
- Domestic Forest Management at the Forest Industry
- Woody Biomass Utilization for Energy

■ Solution

- Monitoring System Design
- Resource Storage & Future Supply Estimation
- Research & Development

■ Technology

- Data-fusion of optical sensor & SAR
- Data Mining for Remote Sensing Data



* Developed on the ERSDAC research program

2-2-6 Predicting and Mapping System of Forest Fires

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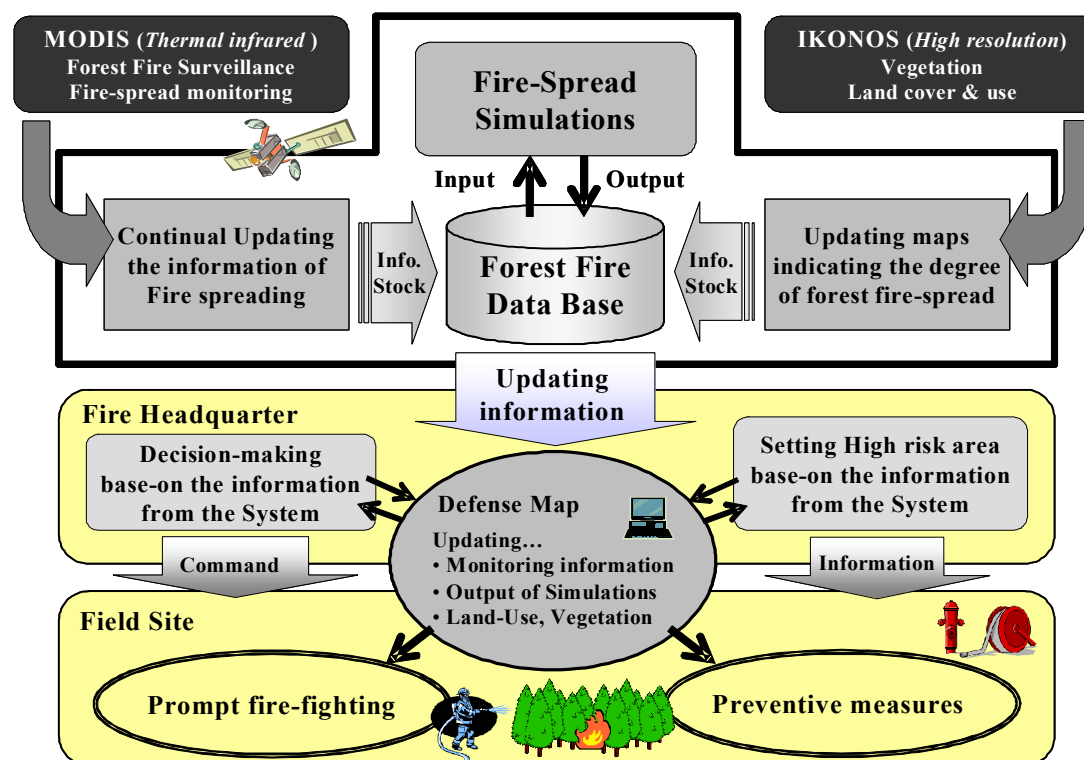
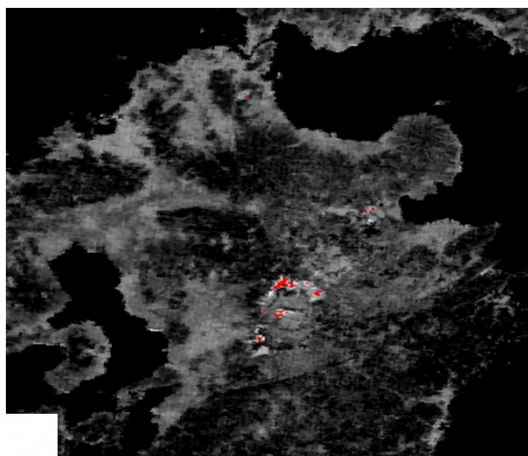
We developed the algorithm for detecting forest fire by using MODIS data, also the method assessing crown fire risk using high-resolution satellite image, and the fire spread forecasting model. Integrated these on WebGIS, we established the system useful for planning fire extinguishing.

■ Key Issue

- Forest Fire

■ Solution

- Forest Fire Monitoring
- Crown Fire Risk Map
- Simulation of Forest Fire Spread



* Developed on the FDMA research program

Mitsubishi Research Institute, Inc.

To contact us: yasuo@mri.co.jp

「BizEarth」 Members

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ASIA AIR SURVEY Co., Ltd.	Mitsui Bussan Secure Directions, Inc.
ESRI Japan Corp.	NEC Corp.
FUJITSU Ltd.	PASCO Corp.
Geosphere Environmental Technology Corp.	Remote Sensing Technology Center of Japan
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July, 2020.